

GenCore version 4.5
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: March 17, 2001, 21:10:03 ; Search time 65.38 Seconds

(without alignments)
159,026 Million cell updates/sec

Title: US-09-456-306-2

Perfect score: 2965

Sequence: 1 MAHSYAEQLIDTLEACQVCR.....GGVGAMIDLARSNIRNIFTP 579

Scoring table: BLOSUM62

Searched: 174772 seqs, 17957048 residues

Total number of hits satisfying chosen parameters: 174772

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	561	18.8	585 2	US-08-426-125-2
2	561	18.8	585 2	US-08-455-355-2
3	514	17.2	548 2	US-08-452-075-3
4	497.5	16.7	671 2	US-08-426-125-8
5	497.5	16.7	671 2	US-08-455-355-8
6	493	16.5	670 1	US-08-363-208-2
7	477	16.0	652 2	US-08-426-125-9
8	477	16.0	652 2	US-08-453-355-9
9	454	15.2	664 2	US-08-426-125-7
10	454	15.2	664 2	US-08-455-355-7
11	454	15.2	667 2	US-08-426-125-6
12	454	15.2	667 2	US-08-455-355-6
13	451	15.1	599 2	US-08-426-125-1
14	451	15.1	599 2	US-08-426-125-3
15	451	15.1	599 2	US-08-426-125-5
16	451	15.1	599 2	US-08-453-355-1
17	451	15.1	599 2	US-08-455-355-3
18	451	15.1	638 2	US-08-426-125-4
19	449	15.0	575 1	US-08-455-355-4
20	442	14.8	638 2	US-08-403-866-7
21	442	14.8	638 2	US-08-426-125-5
22	441.5	14.8	637 2	US-08-453-355-5
23	441.5	14.8	637 2	US-08-426-125-10
24	438	14.6	648 1	US-08-455-355-10
25	437	14.6	648 1	US-08-321-356-4
26	365	12.2	554 1	US-07-839-433-2
27	332	11.1	578 1	US-08-458-120-2
28	332	11.1	578 1	US-08-867-970-2

29	278.5	9.3	331 2	US-08-245-511-58	Sequence 58, Appl
30	278.5	9.3	331 2	US-08-600-993A-58	Sequence 58, Appl
31	222	7.4	568 1	US-08-262-424-7	Sequence 7, Appl
32	222	7.4	568 2	US-08-493-197-7	Sequence 7, Appl
33	222	7.4	568 2	US-08-717-587A-4	Sequence 4, Appl
34	222	7.4	568 3	US-08-883-610A-4	Sequence 4, Appl
35	222	7.4	568 4	US-08-883-610A-4	Sequence 4, Appl
36	213.5	7.2	337 5	US-07-662-223-2	Sequence 2, Appl
37	196	6.6	552 1	US-07-642-734C-4	Sequence 4, Appl
38	128	4.3	3567 2	US-08-439-009A-4	Sequence 4, Appl
39	128	4.3	3567 3	US-08-246-982A-16	Sequence 16, Appl
40	126	4.2	3119 1	US-08-453-265-16	Sequence 4, Appl
41	126	4.2	3119 1	US-08-457-227C-4	Sequence 4, Appl
42	124.5	4.1	3118 2	US-08-804-227C-4	Sequence 8, Appl
43	121.5	4.1	3118 2	US-08-457-227C-8	Sequence 8, Appl
44	121	4.1	2647 2	US-08-583-562B-8	Sequence 8, Appl
45	121	4.1	2647 2	US-08-779-113-8	Sequence 8, Appl

ALIGNMENTS

RESULT 1
US-08-426-125-2
Sequence 2, Application US/08426125
Patent No. 5853973
GENERAL INFORMATION:
APPLICANT: Kakefuda, Genichi
APPLICANT: Olt, Karl Heinz
APPLICANT: Kwagh, Jae-Gyu
TITLE OF INVENTION: Stockton, Gerald W.
TITLE OF INVENTION: Structure-Based Designed Herbicide
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Dardy & Dardy
STREET: 805 Third Avenue
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10022-7513
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/426,125
FILING DATE: 20-APR-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Rodinson, Joseph
REGISTRATION NUMBER: 33,448
REFERENCE/DOCKET NUMBER: 0646/0A674
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)-527-7783
TELEFAX: (212)-753-6237
TELEX: 236687
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 585 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
ORGANISM: Lactobacillus plantarum
US-08-426-125-2
Query Match 18.8%; Score 561; DB 2; Length 585;
Best Local Similarity 27.3%; Pred. No. 5, 8e-48;

	Matches	146;	Conservative	118;	Mismatches	250;	Indels	20;	Gaps	2
QY	9	LIDTLEAGCKRTKYLGVGDSINPIYAAV--RQSDIEKVHNRNEEAAFAAAGESLITGED	66							
Dd	9	VIVILRWGDHLTYLGIPGGSINSIMSLAEKRIRHYIYORHVETVEGAMAAAADAKTLTKGI	68							
QY	67	AACAACSGPNTLLIGLYDLSHRNCAKVLTAISHISSAQISGFPEFTELPETLIFKCSCSY	126							
Dd	69	GYVGFGSAGGGSTILLMNGLDVDAREDNHPLALLIQGFPTTGMMNDTFBEMENPIYADVADY	128							
QY	127	CENVNGEGCEGERLLHHAISTMAKKVSVVYIPGDIKEDAGDGTVSNSTISSGPVV-F	185							
Dd	129	NVTAVNAATLPHYTIDALRRAYAHOGVAVOIIPVDLPWQOISAEWDYASANNYPPLPE	188							
QY	186	PDETEAAALVEAIINNKSVTLPFCGAGVKNAAROVLETAKIKSPIHALCGQYIOHENP	245							
Dd	189	PDQVQNTRLRGLTLAAERFLYYIGGARAKGKELEDOLSKTLKIPLMSTYPAKGIVADRP	248							
QY	246	FEVGMSGLLGYCAGVDASNEADDLLILLTDFPYSD---FLPRDNAQYDINCANIGRGT	301							
Dd	249	AYLGSANRYAOKRPAKNALQAQDVVLFVGNPNPFPAEVSRAFKNTRFLODIDPAKLGKH	308							
QY	302	TKYVPYTGVAATEIENLIIPHVEKIDRSFLDML--KANHEKLSSVYETTTHNNEKVR	358							
Dd	309	KTDIAVLDAQTKTLAAILAQVSEIRSTPWQANLNKWKRAJLASLEB-----KOEBP	362							
QY	359	IHPREVASILNELDAKDAVFYDTGMCNVMAHRIETEPGRDRDFGSPFHGTMANLRPA	418							
Dd	363	LQAYQLRAYNKIAEPDALYSIDVGDINLNANHRLKLPNSNHITSNL-FATMGVIGIRA	421							
QY	419	IGAQSVDNRKQYIAMCGDGLMLGELLTYKVLHQLPKLAVFNNSLSGMVLEMEQ	478							
Dd	422	IAAKNIYPEROVFNLAGDSAGMTMODLVTOYQHHLPVYNVEFYTCQYGFIDEQEDTNQ	481							
QY	479	PEF-GTDHEVNFEEIAAAGISKSVRIDPPKVVRE--OLAELAVAPGLIDIY	529							
Dd	482	NDFIVEFNDDIFSKIADGVHMGAIRVNKIEDLPDYFEAKAIAQHEPLIDAV	535							
RESULT	2	US-08-455-355-2								
		; Sequence 2, Application US/08455355								
		; Patent No. 5928937								
		GENERAL INFORMATION:								
		APPLICANT: Kaketuda, Genichi								
		APPLICANT: Otc, Karl-Helinz								
		APPLICANT: Kwagh, Jae-Gyu								
		APPLICANT: Stockton, Gerald W.								
		TITLE OF INVENTION: Structure-based Designed Herbicide								
		TITLE OF INVENTION: Resistant Products								
		NUMBER OF SEQUENCES: 10								
		CORRESPONDENCE ADDRESS:								
		ADDRESSEE: Dardy & Darby								
		STREET: 805 Third Avenue								
		CITY: New York								
		STATE: New York								
		COUNTRY: USA								
		ZIP: 10022-7513								
		COMPUTER READABLE FORM:								
		MEDIUM TYPE: Floppy disk								
		COMPUTER: IBM PC compatible								
		OPERATING SYSTEM: PC-DOS/MS-DOS								
		SOFTWARE: Patentin Release #1.0, Version #1.30								
		CURRENT APPLICATION DATA:								
		APPLICATION NUMBER: US/08/455,355								
		FILING DATE: 31-May-1995								
		CLASSIFICATION: 435								
		ATTORNEY/AGENT INFORMATION:								
		NAME: Robinson, Joseph								
		REGISTRATION NUMBER: 33,448								
		REFERENCE/DOCKET NUMBER: 0646/1A674-US1								
		TELECOMMUNICATION INFORMATION:								
		TELEPHONE: (212)-527-7783								

TELEFAX: (212)-753-6237
TELEX: 236687
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 585 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHEICAL: NO
ORIGINAL SOURCE:
ORGANISM: Lactobacillus plantarum
US-08-455-352

Query Match 18.8% Score 561; DB 2; Length 585;
Best Local Similarity 27.3%, Pred. No. 5.8e-48,
Matches 146; Conservative 118; Mismatches 250; Indels 20; Gaps 8;

9 LTIDTDAQGVKKRIYVAGDLSNPIYDAV--RQSDIEWHVNRNEEAAFAAGAESITIGEL 66
| : | | | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
9 VIKVLAEAVGVDLHLYGIPEGSSINSINDALSABEDRHNYIQVNHHEEVGAANAADAKLKIGKI 68
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
67 AVCAASCGPGHNHLIQLGYDSHRNGCAKYLALASHIPSAOIGSTPFQETHPEILKECSGY 126
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
69 GVCFSGSGGGHHLMNGCYLDAREDDVPVALIIGQGTTCGMMDTFQEMENNDPIYADVADY 128
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
127 CENVANGEGGEERLLHHAIOSTWAGKGSVVVIIPDIKEDAGDGDTYSNSTISSGTPV-F 185
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
129 NTATMAATLRPHVIDEARIRRAVAHQGVAVVOIPLVDLPWOQISAEDWTASANNOTPLPPE 188
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
186 PDPTAALALVEAINNAKSVTLLFCGAGVNABAQVYLEAEKISPIGHAIKGQYIOHENP 245
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
189 PDVQAVRTLTQTLLAERPRLIYYGIGARKAKELEQJSLTKTLPLMSTYPKAGIVADRYR 248
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
246 FEVVGSGLLGACACDARNEDALLLGTDPRPSD----FLPKDNVAQVDINGCHIGRRT 301
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
249 AYLGSANRRAROKPANEAQAQADVVLFEVGNNTPEAFESKAFTNTRYFLQIIDIPAKLKGRH 308
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
302 TVKYVPTGDVAATIENILLPHYEKTDRSFLDRML---KAHERKLSSVETYNHVEKHVP 358
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
309 KTDIAVLADAOQKTLAAILAQVSESPSPFWQGANLVANKNMRAVLAILED-----KOEGP 362
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
359 IHPEVVASILELADKQAVFTVDIGMCNVHARTIENDECRDFVSGSRHGCTMANALPHA 418
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
363 LGAYOVERAANKIAEPDAIYSIDVDGINLNMRHLKLPNSNRHTSNL-PATMGVGPIGA 421
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
419 IGAOSVDNRNROIVAMCGDGLMGLIGELLFYVKLQHPDKLPAVFENNSSLGWVKLEMTLVESQ 478
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
422 IAANKINYPEROVNLNLAGGGGASMGMODLVTVQVCHLVINVVFNLCOYGFIKDQEDQEDTNQ 481
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
479 PEF-GTDEHEVNFALIAAAGIKSVRITDPKKVRE-QLAELAVAPGPVLIDIV 529
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
482 NDFIGVENDDIDFSKIADGVHMQAFRVNKITEQLPDVEEQAKALAHBPVLIDAV 535
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |

RESULT 3
US-08-452-075-3
Sequence 3, Application US/08452075
Patent No. 5998178
GENERAL INFORMATION:
APPLICANT: HASHIGUCHI, KEN-ICHI
APPLICANT: KISHINO, HIROKO
APPLICANT: TSUTIMOTO, NORIHARU
TITLE OF INVENTION: L-ISOLEUCINE-PRODUCING BACTERIUM AND
METHOD OF INVENTION: METHOD FOR PREPARING L-ISOLEUCINE THROUGH FERMENTATION
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLON, SPIVAK, MCLELLAND, MAIER & NEUSTADT
STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, FOURTH FLOOR
CITY: ARLINGTON
STATE: VIRGINIA

COUNTRY: USA
ZIP: 22202
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/452,075
FILING DATE: 26-MAY-1995
CLASSIFICATION: 435
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: JP 116340/1994
FILING DATE: 30-MAY-1994
ATTORNEY/AGENT INFORMATION:
NAME: OBLON, NORMAN F.
REGISTRATION NUMBER: 08/452,075
REFERENCE/DOCKET NUMBER: 10-741-0
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 413-3000
TELEFAX: (703) 413-2220
TELEX: 248855 OPAT UR
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 548 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-452-075-3

Query Match 17.2%; Score 514; DB 2; Length 548;
Best Local Similarity 30.1%; Pred. No. 3e-43;
Matches 164; Conservative 91; Mismatches 249; Indels 40; Gaps 13;

6 AEOILDTLEAGYKRTIYGLVGSLSNPVDAVROSIDIEWHVNNEEAAFAAGNESLITGE 65
1 AEOILDTLEAGYKRTIYGLVGSLSNPVDAVROSIDIEWHVNNEEAAFAAGNESLITGE 65
4 AOVVVALRQAGVNVFCYPCGAIMPVYDALYDGVENHLCRHGCAAMAATGYARATGK 63
66 LNVCAASCGPGNTHLQGLYDSHRNGAKYLATSHIPSAGISFTFOETPELIFKCSG 125
11 AEOILDTLEAGYKRTIYGLVGSLSNPVDAVROSIDIEWHVNNEEAAFAAGNESLITGE 65
64 TGVCIATSCGATNLITGLDALDLSIPVATIGOVSAPIGTDARQEVNVLGLSLACTK 123
126 YCEMVNGEGEGERILHHAIOSTWAGK-GVSVVYIPGDIKEDAGDGTYSNSTISGTPV 184
124 HSFVOSLEETPRIMAEAPVACSGRGPVLDIPKDI-QLASGDELPWTYYEN--EVT 180
185 FPDPTFAALVEAIIINNAKSVTLFCGAGVKNARA--OVLIAEKIKSPIGHALGKQYIQH 242
11 AEOILDTLEAGYKRTIYGLVGSLSNPVDAVROSIDIEWHVNNEEAAFAAGNESLITGE 65
181 FPH-AVEEQAQMLAKAKRPMLYVGGVGAQVAPALREFLAATKMPATCTLKGAVEA 239
243 ENFEVGMGSLGAGCVDASNEADLLILGTF-----PYSDPLPKDVAQVDINGAH 296
240 DRYVYLICMGMHTKANRFAVQCDLLIAVGAFFDRVTGKLTFFAPHASVIMHDDIPAE 299
297 IGRRTVYKVPVTDVAATFENILPHYKEKTRSFLLRMLKAHBRKLSVYETTHHYEKH 356
300 MNKLRANHALGQDLNALPRLALQOPLNQCDOHCAOLRDEHSMR-----YDH----- 347
357 VPIHPEVASILNELADK---DAVFTVDTGCMVNHARYIEN--PGSTRDFVSGFRHGTM 411
348 -PEDAIYAPLLKQLSDRKADCVVTTDVQOHMAAQAHIATHRPE---NFTISSGLGTM 403
412 ANMLPNAIGASVDRNRQVYIAMCGDGLGMLGELLTVKHLQPLKAVYVNNNSLGVKL 471
404 GFCPLPAVGAQVAPRNDTVVCISGDSFMMNVDELCTVKKRQLPLKIVLLDNQRLGVRO 463
472 EMLVEGQPERG---TDHEEVNFAEIAAAGIKSVRTTDPKKVREOLAELAVPGVLIID 527
464 WOOLFQERKSETTLTDNDP--FLMLASAFGICGHITRKDOVEALDPTLNSDGPILLH 521
528 LVWD 531
1 AEOILDTLEAGYKRTIYGLVGSLSNPVDAVROSIDIEWHVNNEEAAFAAGNESLITGE 65

DB 522 VSID 525

RESULT 4
US-08-426-125-8
Sequence 8, Application US/08426125
Patent No. 5853973
GENERAL INFORMATION:
APPLICANT: Kakefuda, Genichi
APPLICANT: Ots, Karl-Heinz
APPLICANT: Kuegh, Jae-Gyu
APPLICANT: Stockton, Gerald W.
TITLE OF INVENTION: Structure-Based Designed Herbicide
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Darby & Darby
STREET: 805 Third Avenue
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10022-7513
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/426,125
FILING DATE: 20-APR-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Robinson, Joseph
REGISTRATION NUMBER: 33,448
REFERENCE/DOCKET NUMBER: 0646/0A674
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)-527-7783
TELEFAX: (212)-753-6237
TELEX: 236687
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 671 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
ORGANISM: Arabidopsis thaliana
US-08-426-125-8

Query Match 16.7%; Score 497.5; DB 2; Length 671;
Best Local Similarity 27.4%; Pred. No. 2e-41;
Matches 157; Conservative 97; Mismatches 261; Indels 59; Gaps 13;

6 AEOILDTLEAGYKRTIYGLVGSLSNPVDAVROSIDIEWHVNNEEAAFAAGNESLITGE 64
1 AEOILDTLEAGYKRTIYGLVGSLSNPVDAVROSIDIEWHVNNEEAAFAAGNESLITGE 64
100 ADILVENLERQGVETFAVFPGASMETHQALTSSSIRNVLPHRHEOGVFAAGTYARSSG 159
65 ELAVCAASCGPGNTHLQGLYDSHRNGAKYLATSHIPSAGISFTFOETPELIFKCSG 124
160 KPGICATISPGATNLVSLGLADLDSVPLVATIGOVPRMIGTDAFOETPIYEVTRST 219
125 GYCEMVNGEGEGERILHHAIOSTWAGK-GVSVVYIPGDIKEDAGDGTYSNSTISGTPV 183
220 KHNVLVWDVEDIRITEAEAFATSGRGPVLDVDPKDI-QOOLAIIPNMFQAMRLPCYMS 278
184 VFPDPTFAAL---VEIINNAKSVTLFCGAGVKNARAQVLELAEKIKSPIGHALGKQYI 240
279 RMPKPPEDSHLEQIVRLISSEKRPVLYVGGCLNNSDELGFVELTGIPVASTLMGSGY 338
241 QHENPEVGMGSLGAGCVDASNEADLLILGTF-----PYSDPLPKDVAQVDING 294

Db 339 PCDDLSLHMLGHTGYVANYAVNEHSDLLAFVGFDDRYTGKLEAFASRAKIYHIDIS 398
QY 295 AHIGRTTVKYPVTDVAATIENTILPHVKEKTDSEFLDRL--KAHERKISSVETETHN 352
Db 399 AEIGKNTTPHVSVCQDVKALOG-----MKVLENAEELKIDFGVWRELN 445
QY 353 VEKH-----VPIHEVVASILNELADKDAVFTVDTGCMVNHARYIENDEGRDP 402
Db 446 VOKRFPLEFTEGFAIPPOYAIKVLDELTDGKAIISTGVGOHOMMAOEFYNNKKPRRW 505
QY 403 VGSFRHGTMANALPHAIGASVDNRNOVIAMCGGGLGMLGELLYTKLHQLPKAVFN 462
Db 506 LSSGGLAMGCGLPALIGASVANDPAIVDIDGGSFIMNVQELATRVENLPVKVLLN 565
QY 463 NSSIGMKLEMLV-----GOPEFGTDHEV--NFAEIAAAGIKSVRTIDP 507
Db 566 NOHIGMV---MOMEDRFYKANRAHTFLGDP---AQDEIFPNNMLLFAACGIFPARVTK 619
QY 508 KKVREQLAEALATPGVPLIDIVTPNALISIPPT 541
Db 620 ADLREALIOTMLDTPGYPYLDVIC--PHOEHLVPMI 652

RESULT 5

US-08-455-355-8
Sequence 8, Application US/08455355
Patent No. 5928937
GENERAL INFORMATION:
APPLICANT: Kakefuda, Genichi
APPLICANT: Ott, Karl-Heinz
APPLICANT: Kwagh, Jae-Gyu
APPLICANT: Stockton, Gerald W.
TITLE OF INVENTION: Structure-Based Designed Herbicide
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Darby & Darby
STREET: 805 Third Avenue
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10022-7513
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,355
FILING DATE: 31-MAY-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Robinson, Joseph
REGISTRATION NUMBER: 33,448
REFERENCE/DOCKET NUMBER: 0646/1A674-US1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)-527-7783
TELEFAX: (212)-753-6237
TELEX: 236687
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 671 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
ORGANISM: Arabidopsis thaliana
US-08-455-355-8

Query Match 16.7% Score 497.5; DB 2; Length 671;
Best Local Similarity 27.4%; Pred. No. 2e-41;
Matches 157; Conservative 97; Mismatches 261; Indels 59; Gaps 13;

QY 6 AEOLIDLEAGVKRYLGVDSLNPIYDAV--ROSDIEVWVHNDEAAFAAGASLITG 64
Db 100 ADIVLEALRQGVETVEFVAPGASMEIHQALTRSSIRNVLPRHGGVFAAEGARSSG 159
QY 65 ELAVCAASGCPNTHIQLYDSHRNGAKVLAIASAIGSTFFQETPELIFKCS 124
Db 160 KFCICATISGPATNIVSLADALDSVPLAITQVPRRMIGDAPFETPIVEVTR5IT 219
QY 125 GYCEWVNGGEGERILHHAIOSTMAGK--GVSVVPIGDIKEDADGYSSTISSGPV 183
Db 220 KHNLYLVMDVEDIPRIIEEFPLATSGRGQPIVVDYPKI--QOQAIPIWQDAMRLPGTMS 278
QY 184 VPPDPLEAAL--VEAINNAKSVTLFCGAGYKNAQAQVLEAEKIKSPIGHALGKOYI 240
Db 279 RMRKPPEDSHLEQIVRLISESKRPVLYGGGCLNSDELGRFVELTGIPVASTIMLGSGY 338
QY 241 QHENPFEVMSGLIGYACVDSNADLLILIGTF-----PISDFLPKNVAQVDING 294
Db 339 PCDDLSLHMLGHTGYVANYAVNEHSDLLAFVGFDDRYTGKLEAFASRAKIYHIDIS 398
QY 295 AHIGRTTVKYPVTDVAATIENTILPHVKEKTDSEFLDRL--KAHERKISSVETETHN 352
Db 399 AEIGKNTTPHVSVCQDVKALOG-----MKVLENAEELKIDFGVWRELN 445
QY 353 VEKH-----VPIHEVVASILNELADKDAVFTVDTGCMVNHARYIENDEGRDP 402
Db 446 VOKRFPLEFTEGFAIPPOYAIKVLDELTDGKAIISTGVGOHOMMAOEFYNNKKPRRW 505
QY 403 VGSFRHGTMANALPHAIGASVDNRNOVIAMCGGGLGMLGELLYTKLHQLPKAVFN 462
Db 506 LSSGGLAMGCGLPALIGASVANDPAIVDIDGGSFIMNVQELATRVENLPVKVLLN 565
QY 463 NSSIGMKLEMLV-----GOPEFGTDHEV--NFAEIAAAGIKSVRTIDP 507
Db 566 NOHIGMV---MOMEDRFYKANRAHTFLGDP---AQDEIFPNNMLLFAACGIFPARVTK 619
QY 508 KKVREQLAEALATPGVPLIDIVTPNALISIPPT 541
Db 620 ADLREALIOTMLDTPGYPYLDVIC--PHOEHLVPMI 652

RESULT 6
US-08-363-208-2
Sequence 2, Application US/08363208
Patent No. 5767366
GENERAL INFORMATION:
APPLICANT: Sathasivan, Kanagasabapathi
APPLICANT: Murali, No. 5767366imoto
TITLE OF INVENTION: A Mutant Acetolactate Synthase Gene From
NUMBER OF SEQUENCES: 2
TITLE OF INVENTION: Resistance To Crop Plants
CORRESPONDENCE ADDRESS:
ADDRESSEE: Llewellyn A. Proctor, Sr.
STREET: 11481 Sheraton drive
CITY: Baton Rouge,
STATE: LA
COUNTRY: USA
ZIP: 70815
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/363,208
FILING DATE:
CLASSIFICATION: 800
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/657,429
FILING DATE: 19-FEB-1991
CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: Proctor St., Llewellyn A.
REGISTRATION NUMBER: 20,152
REFERENCE/DOCKET INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (504)275-8689
INFORMATION FOR SEQ. ID NO. 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 670 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-363-208-2

Query Match 16.5%; Score 493; DB 1; Length 670;
Best Local Similarity 27.5%; Pred. No. 5,6e-41;
Matches 198; Conservative 97; Mismatches 259; Indels 60; Gaps 14;

QY 6 AEQIDITLLEAGVKRYIGLVGDSLNPIVDVAV-RQSDIEWVHVNNEEAAPAGAESLITG 64
DB 100 ADILVLEALERQGVETVFAVPGASMEIHQALTRSSSTRNVLPHEGCGVFAAGYARSSG 159
QY 65 ELAVCAASGPGMTHLQGLYDSHRNGAKVLAISHIPSAOIGSTFQETHPELTFKES 124
DB 160 KPGICATISGPGATNLVSGIADLDSVPLVATIGQVPRMIGTDAFOETPIYEVTRST 219
QY 125 GYCEMVNGGGERILHHAIOSTMACK-GVSVVYIPDIAKEDAGDGTYSNSTISGTPV 183
DB 220 KHNVLVMDVEDIRITEAEFLATSGRGPVLVDVPRDI-QOOLAIIPNWDQAPRLPYMS 278
QY 184 VFDPPTPEAAL---VEAINNASKVTLEFCGAGVNARQVLELEKISPIGHALGKQYI 240
DB 279 RMKRPEDSHLEQIVRLISSEKRPVLYVGGCLNSDELGRFVELTGIPVASTLMGIGSY 338
QY 241 QHENPEVSGSLGAGVADASNEADLLILGTDG----PYSDFLPKDNVAQVDING 294
DB 339 PCDELSTLIMGHGTYVANYAVEHSDDLAFGRFDDRTGKLEAFASAKIVHIDIDS 398
QY 295 AHIGRTTYKVPYTGVAATIENTILPRVKEKTRDSFLDML--KAHERKLSVVEYETYN 352
DB 399 AEIGKMKTPHVSVCQDKLALOG-----MNKYLENRAEELKIDFGVMRELN 445
QY 353 VEKH-----VPIHPYVASILNELADKDAVFVDVDMCNVHARIENPEGRDF 402
DB 446 VQKRPPLSPKTPGEAIPQYAIKVLDELTDGKAIIISTGVGOHOMMAAOFY-NYKRPROM 504
QY 403 VGSFRIGTMANALPHIAGQSVDRNROVIMCGDGLMGLGELLTVKHLQPLKAVFN 462
DB 505 LSSGGIGAMKFGIPRAIGASVANPDALVIDDDGSFIMVQELATIRVNLVLYKILLN 564
QY 463 NSSLGWKLKMLEVE-----GQPEFGTDHEEV--NFAETAAAGIKSVRTIDP 507
DB 565 NQHLGVY---MQMEDREFFYKANRAITFLGDP---AQEDEIRPNMLLFAACGIPAAARVTK 618
QY 508 KKYREQLAEALATPPGLIDIVTDPNALSTIPPI 541
DB 619 ADLREAIQTMLDTPPGPYLDVIC-PRQEHVLPML 651

US-08-426-125-9
Sequence 9, Application US/08426125
Patent No. 5853973

GENERAL INFORMATION:
APPLICANT: Kakefuda, Genichu
APPLICANT: Oti, Karl-Helmut
APPLICANT: Kuegh, Jae-Gyu
APPLICANT: Stockton, Gerald W.
TITLE OF INVENTION: Structure-Based Designed Herbicide

TITLE OF INVENTION: Resistant Products
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Darby & Darby
STREET: 805 Third Avenue
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10022-7513
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/426,125
FILING DATE: 20-Apr-1995

CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Robinson, Joseph
REGISTRATION NUMBER: 33,448
REFERENCE/DOCKET INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)-527-7783
TELEFAX: (212)-753-6237
TELEX: 236687

INFORMATION FOR SEQ. ID NO. 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 652 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOHETICAL: NO
ORIGINAL SOURCE:
ORGANISM: Brassica napus
US-08-426-125-9

Query Match 16.0%; Score 477; DB 2; Length 652;
Best Local Similarity 26.1%; Pred. No. 2,2e-39;
Matches 148; Conservative 104; Mismatches 270; Indels 44; Gaps 12;

QY 6 AEQIDITLLEAGVKRYIGLVGDSLNPIVDVAV-RQSDIEWVHVNNEEAAPAGAESLITG 64
DB 82 ADILVLEALERQGVETVFAVPGASMEIHQALTRSSSTRNVLPHEGCGVFAAGYARSSG 141
QY 65 ELAVCAASGPGMTHLQGLYDSHRNGAKVLAISHIPSAOIGSTFQETHPELTFKES 124
DB 142 KPGICATISGPGATNLVSGIADLDSVPLVATIGQVPRMIGTDAFOETPIYEVTRST 201
QY 125 GYCEMVNGGGERILHHAIOSTMACK-GVSVVYIPDIAKEDAGDGTYSNSTISGTPV 183
DB 202 KHNVLVMDVEDIRITEAEFLATSGRGPVLVDVPRDI-QOOLAIIPNWDQAPRLPYMS 260
QY 184 VFDPPTPEAAL---VEAINNASKVTLEFCGAGVNARQVLELEKISPIGHALGKQYI 240
DB 261 RLQRPPEVSOLGQIVRLISSEKRPVLYVGGCLNSSELEGRFVELTGIPVASTLMGIGSY 320
QY 241 QHENPEVSGSLGAGVADASNEADLLILGTDG----PYSDFLPKDNVAQVDING 294
DB 321 PCDELSTLIMGHGTYVANYAVEHSDDLAFGRFDDRTGKLEAFASAKIVHIDIDS 380
QY 295 AHIGRTTYKVPYTGVAATIENTILPRVKEKTRDSFLD-----RMLKAHERKLSVVEYET 349
DB 381 AEIGKMKTPHVSVCQDKLALOGMNKYLENRAEELKIDFGVMSELSEQOKRPPLSPK 440
QY 350 THNVEKHVPIHPREYVASILNELADKDAVFVDVDMCNVHARIENPEGRDFVGSFRHG 409
DB 441 GE-----ALPQYAIQVDELQGKAIISTGVGOHOMMAAOFYKYK-PRQHLSSGIG 493
QY 410 TMANALPHATGAOSVDRNROVIMCGDGLMGLGELLTVKHLQPLKAVFNSSIGW 469


```

;      TOPOLOGY: linear
;      MOLECULE TYPE: protein
US-08-426-125-7

```

Query Match	15.28	Score 454	DB 2:	Length 664
Best Local Similarity	25.13	Pred. NO. 4.9e-37		
Matches 145	Conservative 102	Mismatches 263	Indels 68	Gaps 13

Qy	6	AEQIDITLLEAGVRRIRIGLVDSINLPYDVAV-RQSDIEMVHVNRNEAAAPAGAESITG	64
Dd	94	SDVLEALERGVYDFVAFPCGASMEIHOALTRSIIIRNVLPHREGCGVFAAEQYAATC	153
Qy	65	ELAVCAASCGFNMHLIOGLYDSHRNCAKVLATASHIPSAOIGSTFFQETHNPETLEKCS	124
Dd	154	PRGVCITATSGGAGNVLISGLDALDLSVPRIATIGQVPRRMIGTDAEQETPIVEVTRSI	213
Qy	125	GUCYEMVNGDGGEBRLIHHALIOSTMAGK-CVSVVYIPEDIAKEDAGDQTSNSRTSSQPV	183
Dd	214	KHNYLVMDVEDIPIRVVAREAFFLARGSRGPVLLIDVPDIOOQ-----L	256
Qy	184	VFPD-----PTE--AAALVEAINNKSVTLFCGAGVKNARQVLELAE	224
Dd	257	VIPMDQPMRLPGYMSRLPKLPNMLLEQLYRLISEKKRYLYVGGCGSSSEELRAFVE	316
Qy	225	KIKSPIHALGCKOYIOHENPFYGVMSGLLYCGACVADSAEADLLILLTGDF-----PY	278
Dd	317	LTGIPVASTLMLGGLAPPTGDELISLMLGMHGTYYANVAVSDSLLALFGVRFDQRYGKL	376
Qy	279	SDPLPKDNVAOVDTNGAICIGRTTYVKRPVYGDVAATIENTILPHVKEKTDRSFLDRMILKAH	338
Dd	377	EAFASRAKIVHIDIDSIEIGKNKOPHYSICADILALOGNLSILESKEGKLKD--FSAW	434
Qy	339	ERKASSVETTHIVENH-VPIHEVYASITNELADDAFPTVDTCGNMWHARLENPE	397
Dd	435	ROELTYOVAKYPLNPKFFEGDAIPQVAYIOVDELITNCSAITSITGVGHOMMAOQYKRYK	494
Qy	398	GTRDPEVCSFRHGTAFMANLPHATIGASQVDNRKNQVJAMCGDGLMLLELLTVKJLHOLPLK	457
Dd	495	-PRQMLTSGGIGANGFGLPAALIGAAGVBRPEVYVDIDGDSFIMNVOELATIKVENLPVK	555
Qy	458	AVFENNSSLCNVKLEMLVEGQPEF-----GTDHEEV---NFAETIAAAGIKTSVR	503
Dd	554	IMLLNNOHLCNV-----VQWEDREYKANRAHTYVIGNSNBEAEIFPNNLKFAEACGVPAAR	608
Qy	504	ITDPKVVREQLAEALVAPGPVLIDYVDPNALSIPPI	541
Dd	609	VTHRDDI-LRAALOKMLDPGCPILLDVIV-PIQEHNLPMI	645

RESULT 10
US-08-455-355-7
Sequence 7, Application US/08455355
Patent No. 5928937
GENERAL INFORMATION:
APPLICANT: Kakefuda, Gentichi
APPLICANT: Ott, Karl-Heinz
APPLICANT: Kwagh, Jae-Gyu
TITLE OF INVENTION: Structure-Based Designed Herbicide
TITLE OF INVENTION: Resistant Products
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Darby & Darby
STREET: 805 Third Avenue
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10022-7513
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

```

1 SOFTWARE: Patent Release #1.0, Version #1.00
2
3 CURRENT APPLICATION DATA:
4 APPLICATION NUMBER: US/08/455,355
5 FILING DATE: 31-MAY-1995
6
7 CLASSIFICATION: 435
8
9 ATTORNEY/AGENT INFORMATION:
10 NAME: Robinson, Joseph
11 REGISTRATION NUMBER: 33,448
12 REFERENCE/DOCKET NUMBER: 0646/1A674-US1
13 TELECOMMUNICATION INFORMATION:
14 TELEPHONE: (212)-557-7783
15 TELEFAX: (212)-753-6237
16
17 TELEX: 236687
18
19 INFORMATION FOR SEQ ID NO: 7:
20
21 SEQUENCE CHARACTERISTICS:
22 LENGTH: 664 amino acids
23 TYPE: amino acid
24 STRANDEDNESS:
25 TOPOLOGY: linear
26
27 MOLECULE TYPE: protein
28
29 US-08-455-355-7

```

Query Match	15.2%;	Score 454;	DB 2;	Length 664;
Best Local Similarity	25.1%;	Pred. No. 4.9e-37;		
Matches 145;	Conservative 102;	Mismatches 263;	Indels 68;	Gaps 13

QY	6	AEOLITDLEAGVNRITGLVGDSTINPLVYDV-RQSDLEWNVHREEMAAAPAESLITG	64
Dd	94	SDVLEALERGCYVDVAYRPOGASMEIHOALTRSSITRNVLPRDEGCVFAEBECYATAG	153
QY	65	ELAVCAASCGPNTLHIOGLYDHSHRNKAUYLAASHIPSAOIGSTFEQFHPETLFEKCS	124
Dd	154	FPGVCIATSGGATNVLVSGLADLLDVSPIVAITGQYPRMIGTADQETPIYEVNRSIT	213
QY	125	GYSCEMNVGCEGEGEILHHAIDOSTMAG-RYSVVYIPQDIAKEDAGDGTYSNSTISGTPY	183
Dd	214	KHNVLDVDEIPRIVREAEFLASGRCPVLIDVPKDIOOQ-----L	256
QY	184	VEPD-----PTE--AAALVEAINNKSVTLPFGAGVKNRAOVLEAE	224
Dd	257	VIRPMDOPRLPGYMSRPLKPLPNMILLEQYVRLISESKKPVLYVGGCSCOSEELRFEVE	316
QY	225	KIKSPIHALGKCOYIOHENPFEVWSGLLGYGACVADSNEADLLILGTDF-----PY	278
Dd	317	LTGIPVASTLWGLGAPFTGDELSTLSMIGMCTGYANYAVDSDLLAFGRFPDDRYTGKL	376
QY	279	SDFLPKDNVAOVINDNGAIGHRTTVKIPRYGDAVATLENILPHNKEKTDNSFLDRMLKAH	338
Dd	377	EAFASRAKIVIIDIDSIEIGKNKOPHVSICADIKLALOGCNLSIESKEGKLID--FSAW	434
QY	339	ERKASSVETETHVEKH-VPIHEVYASITNELADGAFVTDGTGCNMIHARYIENPE	397
Dd	435	ROELTVQKVYRPLNFKFEGGAIPIQYVIAQVDELITNSASIIITCVGOHOMAAOYKYRK	494
QY	398	GTRDPVGSFRHGTANALPHAIGASQVDNRNOYIAMCGDGLMGLTCELLTVKLOHPLK	457
Dd	495	-PRQMLVSGGIGANGFGLPAIGAABRPDEVVYDIDGDSFIMNOGLATIKENLPVK	555
QY	458	AVVENNSSLGVKLEMLVEGQPEF-----GTUDEEV---NFAETAAAGIKSVR	503
Dd	554	IMLNNOHLMGV-----VQWEDRFYKANARATYTGNSNEAETIPRMILKEAECQVPAAR	608
QY	504	ITDPKKVREGOLAEALAPGVPLIDIVDPMNLSIPPI	541
Dd	609	VTHRDDLRALQKMLDPGVPDLVDIV-PIQEHVLPPI	645

RESULT 11
US-08-426-125-6
: Sequence 6, Application US/08426125
: Patent No. 5853973
: GENERAL INFORMATION:

APPLICANT: Kakefuda, Genichi
APPLICANT: Ott, Karl-Heinz
APPLICANT: Kwagh, Jae-Gyu
TITLE OF INVENTION: Stockton, Gerald W.
TITLE OF INVENTION: Structure-Based Designed Herbicide
TITLE OF INVENTION: Resistant Products
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Darby & Darby
STREET: 805 Third Avenue
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10022-7513
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/426,125
FILING DATE: 20-APR-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Robinson, Joseph
REGISTRATION NUMBER: 33,448
REFERENCE/DOCKET NUMBER: 0646/0A674
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)-527-7783
TELEFAX: (212)-753-6237
TELEX: 236687
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 667 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
US-08-426-125-6

Query Match 15.2%; Score 454; DB 2; Length 667;
Best Local Similarity 25.0%; Pred. No. 4.9e-37;
Matches 147; Conservative 100; Mismatches 252; Indels 90; Gaps 14;

6 ABOIDTLEAGVGRITGVGDSLNPIVDVAV-ROSDIEWVHVRNEAAFAAGASLITG 64
157 SPVLEALEREGETVDFVAVPGASMEIHOALTRSSITRNVLPRHOGGVFAAGYARATG 156
65 ELAVCAASCGPNTHLIOGLYDSHRNGAKVLAIAASHIPSAQIGSTFPOETHPPELIFKES 124
157 PFGVCIAITSGPATNLVGLDALDLSVPIVATGOVPRRMIGTDAFOETPIVEVTRST 216
125 GYCEWVNGGEGEERLIHHAIOSTMAK-GVSVVVTPGDIKEDAGDGYSTNSSTSSGPV 183
217 KHNVLVMDVEDIPRVRAFFLARSGRCPILLIDVPKIDIOO-----L 259
184 VFPD-----PTE- -AAALVEAINNAKSVTLFCGAGVKNARAQVLELAE 224
260 VIPMDQPMRLPGVMSRLPKLPNEMMLEQIVRLISESKKPVLYOGGCSQSSSEDLIRVE 319
225 KIKSIYGAIGAKOYIOHENPPEVMSGLLGACVDASNEADLLILITGTF-----PY 278
320 LTGIPVASTLGLAFTPGDELISMLGMHGTVVYANYAVDSSDLLLAGVAFDDRVTKL 379
279 SDPLPKDVAOVINDGAIIGRTTYKYPVTDVATINILPHKKEKIDRFSLRMLKAH 338
380 EAFPSRAKIVIHIDISAGIKGNKOPHYSICADIKIALOG-----LMSLESK 426
339 ERKL-----SSVVEITYTNVAKV-----PIHEVYASILNELADKDAVETVDMCN 386
427 EGKILKDFSAARQELTEBKAKHPINLTKFGAIFPQYAIQVLDLITNGNAILITSGVGQH 486

387 VMHARYENPEGTDPFVSGFRHGTMANLPHIGAQSVDRNROYIAMCGDGLGMLGEL 446
487 MAAOYTYKRR-PKOWLISGIGAMGFGUPATIGAAGRDEVDVDDGDSFTMNVOL 545
447 LTVKLHQLPLKAVFNNSSAGVKLEMLVEGPER-----GTDHEEV---NFAE 492
546 ATKIVENLPVKIMLLNQHLMV-----VQMEDRYKANRAHTIYIGNPSNEAEITPNMLK 600
493 TAAAGIKSVRTIDPKKVRQELAEALATPGVYLIDIVTDPAALSTIPPT 541
601 FAACGVPAARVTHRDILRAIOLKMLDTPGPYLLDIV-PHOEHVLPWI 648

RESULT 12
US-08-455-355-6
Sequence 6, Application US/08455355
Patent No. 5928937
GENERAL INFORMATION:
APPLICANT: Kakefuda, Genichi
APPLICANT: Ott, Karl-Heinz
APPLICANT: Kwagh, Jae-Gyu
TITLE OF INVENTION: Stockton, Gerald W.
TITLE OF INVENTION: Structure-Based Designed Herbicide
TITLE OF INVENTION: Resistant Products
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Darby & Darby
STREET: 805 Third Avenue
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10022-7513
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,355
FILING DATE: 31-MAY-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Robinson, Joseph
REGISTRATION NUMBER: 33,448
REFERENCE/DOCKET NUMBER: 0646/1A674-US1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)-527-7783
TELEFAX: (212)-753-6237
TELEX: 236687
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 667 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
US-08-455-355-6

Query Match 15.2%; Score 454; DB 2; Length 667;
Best Local Similarity 25.0%; Pred. No. 4.9e-37;
Matches 147; Conservative 100; Mismatches 252; Indels 90; Gaps 14;

6 ABOIDTLEAGVGRITGVGDSLNPIVDVAV-ROSDIEWVHVRNEAAFAAGASLITG 64
97 SDVLEALEREGETVDFVAVPGASMEIHOALTRSSITRNVLPRHOGGVFAAGYARATG 156
65 ELAVCAASCGPNTHLIOGLYDSHRNGAKVLAIAASHIPSAQIGSTFPOETHPPELIFKES 124
157 PFGVCIAITSGPATNLVGLDALDLSVPIVATGOVPRRMIGTDAFOETPIVEVTRST 216


```

QY 125 GYCEMVNGGQGERILHHAQSTMACG-GYSVVVPIEDIKEDAGDGTYSNSTISSGTPV 183
DB 217 KHNVLVDVEDIDPRVVEAEFLARSGPPLIDVDPKIDQQ-----L 259
QY 184 VFPD-----PTE--AAALVEAIINNAKSVTLFCGAGVKNARAQVLEAE 224
DB 260 VIFDMQPMRLPGYMSRLPLPBNMLLEQIVRLISEKKRVLYVGGCQSSSDRLRFVE 319
QY 225 KIKSPICHALGKQYIOHENPFEVMSGLGACVADASNEADLLILGTF-----PY 278
DB 320 LVTGPAVASTLMGLGAPFTGDELISLMGCMGTVYANVAVSSDLLLAFGRFDDRYTKL 379
QY 279 SDPLPDNVAQVINDGAHTRRTTVKPVYGDVAATENTLPHVKEXTDSFLDMLKAH 338
DB 380 EAFASRAKIYHIDISAEICKNKQPHVISCADIKLALQ-----LNSLIESK 426
QY 339 ERRL-----SSVETPYTHNVKHHV-----PIHPEVASILNELADKAVPVPYDGMCN 386
DB 427 ESKLKDFSAMROELTEQKKHPLNFKTGGDALPPOYAIOVLDELINGMNIISTGVQHQ 486
QY 387 VMHARYLENPEGTREDFVGSFRHGTMANALPHAIGAOQSVDRNRQVIAMCGDGLMLGEL 446
DB 487 MMAQYKVKYK-PRQMLTSGGLAMGRCGLPAIGAAGRPDEVVDIDGSGFLMNVQEL 545
QY 447 LTVKLIQPLKAVVFNSSLGMYKLEMLVEGQPEF-----GTDHEEV--NFAE 492
DB 546 ATTKVENLPVKIMLLNQHIGMV-----VQMEDRFYKANRAHYTLGNPSNEAEIIFPMLK 600
QY 493 IAAAGIKSVITDPKKVYRQALAEALAYPPVLIDIVTDNALSIPPTI 541
DB 601 FAECGVPARVTHRDDLRALQIKMLDTPGPVLDIVT-PhoeHVLPMI 648

```

RESULT 13

```

US-08-426-125-1
Sequence 1, Application US/08426125
Patent No. 5853973
GENERAL INFORMATION:
APPLICANT: Kakefuda, Genichi
APPLICANT: Ott, Karl-Heinz
APPLICANT: Kwagh, Jae-Gyu
APPLICANT: Stockton, Gerald W.
TITLE OF INVENTION: Structure-based Designed Herbicide
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Darby & Darby
STREET: 805 Third Avenue
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10022-7513
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/426,125
FILING DATE: 20-APR-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Robinson, Joseph
REGISTRATION NUMBER: 33,448
REFERENCE/DOCKET NUMBER: 0646/0A674
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)-527-7783
TELEFAX: (212)-753-6237
TELEX: 236687
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 599 amino acids
TYPE: amino acid

```

```

STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
ORGANISM: Zea mays
US-08-426-125-1

```

```

Query Match 15.1%; Score 451; DB 2; Length 599;
Best Local Similarity 25.9%; Pred. No. 8.2e-37;
Matches 148; Conservative 103; Mismatches 266; Indels 54; Gaps 15;

```

```

QY 6 AEQIDLEAGVYKRYIGLVGDSLNPVDAVROSIEWHV-RNEEAAPAAQESLITG 64
DB 29 ADILVESLERGVADVAFAYPGASMEIHQALTPSPVIANHLFHEQGEAPAAAGVARS 88
QY 65 ELAVCAASCGPGNTHLIGLYDSHRNCAKVLATASHPSAQISTGFQETHPELRECS 124
DB 89 RVGCJATSGPGATNLVSALADALDSVPWVAITGQVPRMIGTDVFOETPIVEVRSIT 148
QY 125 GYCEMVNGGQGERILHHAQSTMACG-GYSVVVPIEDIKEDAGDGTYSNSTISSGTPV 183
DB 149 KHNVLVDVEDIDPRVVEAEFLARSGPPLIDVDPKIDQQMAVP-VMDKPMSLPYIA 207
QY 184 VFPDPTAEAL-----VEAINNAKSVTLFCGAGVKNARAQVLEAEIKSPIGHALGKQYI 240
DB 208 RLKRPATLELEQVLRVYGSRRPVLYVGGCARSGBELRPFELNGIPYTTLMGLGNF 267
QY 241 QHENPFEVMSGLGACVADASNEADLLILGTF-----PYSDFLPDNVAQVINDG 294
DB 268 PSDDPLSLRMIGMGTYYAVAVDKADLLALAGREDRDYTKIEAFASRAKIYHVIDP 327
QY 295 AHIGRTTVKVPYTGDAATENTLPHVKEXTDSFLD-----RMLKAHERKLSVETV 349
DB 328 AETGKNKQPHVISCADIKLALQGNMALLEGSTSKSFSFSGWDELDOQRERPL--GY 384
QY 350 THNVEKHPIHPEVVASILNELADKDAVFYDGMCMVMHARY--TENPGRDFVGSFR 407
DB 385 KYSNE--IQPOYAIOVLDELKGEALIGTGVOHQHMAAQYTYTRP--KQMLSSAG 438
QY 408 HGTMANALPHAIGAOQSVDRNRQVIAMCGDGLMLGELLTVKLIQPLKAVVFNSSLG 467
DB 439 LGAMGFGLPAAAGASVNPGVTVVDIDGDSFLMNVQELAMIRLENLPVKVFLNQHIG 498
QY 468 MVKLEMLVE-----GQPEFTDHEV--NFAEIAAAGIKSVITDPKKV 510
DB 499 MV-----VQMEDRFYKANRAHYTLGNE--NSEIYPDEVTIAGKFNIPAVRTKKNEV 550
QY 511 REOLAALAYPPVLIDIVTDNALSIPPTI 541
DB 551 RAAIKMLTPGPVLDIVT-PhoeHVLPMI 580

```

RESULT 14

```

US-08-426-125-3
Sequence 3, Application US/08426125
Patent No. 5853973
GENERAL INFORMATION:
APPLICANT: Kakefuda, Genichi
APPLICANT: Ott, Karl-Heinz
APPLICANT: Kwagh, Jae-Gyu
APPLICANT: Stockton, Gerald W.
TITLE OF INVENTION: Structure-based Designed Herbicide
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Darby & Darby
STREET: 805 Third Avenue
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10022-7513

```



```

Db 268 PSDDPLSLRMLGHHGVYANYAVDKADLLALGVREDDRVTKIEAFASRAKIVHVDIDP 327
QY 295 AHIGRTTVYYPVTGVAATIEIENILPHVKEKTRSFLD-----RMLKAHERKLSVYETY 349
Db 328 AEIGKNKOPHVSTICADYKLLALOGMNALLEGSTSKSFDFGSMNDELDOCKREFFL---GY 384
QY 350 TNNVEKHVPDIHPYVASILNELADKDAVPTVDTGMCNVHARY--IENPECTHDEVGSR 407
Db 385 KYSNEE---IOPQYAIQVDELTKGEAIICTGVGOHOMAAQYTYKRP---RQWLSSAG 438
QY 408 HGTMANALPHAICAQSVDRNRROYIAMCGDGLGMLLGELLTVKIHQIPLKAAVFPNNSLG 467
Db 439 LGAMGGLPAAGASVANPGVTVDIDGDSFLMVOELAMIRIENLPVKVFLNNQHLG 498
QY 468 MVKLEMLVE-----GOPEFGTDHEV--NFAEIAAAGIKSVRTDPKRY 510
Db 499 MV-----VQMEDRFYKANNRAHTYLGNE---NESEITPDEVTIKGFNIPAVRYTKKNEY 550
QY 511 REQLAEALAYPGPVLIDIVTPNALSIPTT 541
Db 551 RAAIKKMLETPGPYLDIIV-PHOEHVLPWI 580

```

Search completed: March 17, 2001, 21:52:20
 Job time: 2537 sec

This Page Blank (uspto)